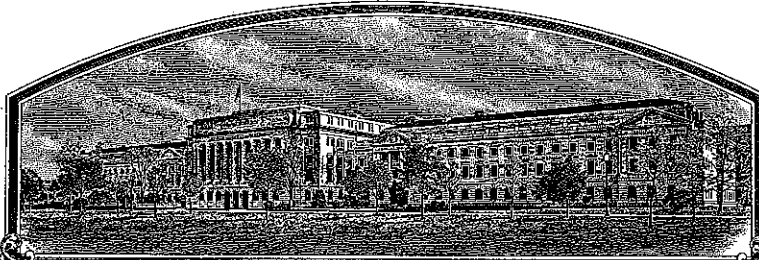


No.

200100006



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Growers Management, Inc., Roth Farms, Inc.,  
and CKM Farms, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE  
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PROPAGATING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED IN THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'Terrapin'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fourteenth day of February, in the year two thousand and six.

Attest:

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

**APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE**  
(Instructions and information collection burden statement on reverse)

1. NAME OF OWNER <b>Growers Management, Inc., Roth Farms, Inc., Florida and TKM Farms, Inc.</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME <b>GX816</b>	3. VARIETY NAME <b>Terrapin</b>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>4401 East P.O. Box 130 Orlando, Belle Grade, FL 33430</b>		5. TELEPHONE (include area code) <b>561-996-6469</b>	FOR OFFICIAL USE ONLY PVPO NUMBER <b>200100006</b> FILING DATE <b>10/11/00</b>
		6. FAX (include area code) <b>561-996-6480</b>	
7. IF THE OWNER NAMED IS NOT A "PERSON". GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <b>Association</b>	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION <b>2000, 1964, 1995</b>	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) <b>Marcel Bruins Florida Vegetable Exchange Nude 54D 6702 DN Wageningen The Netherlands</b> <b>David Basore Physical Address: 1100 N. Main Street, Ste D Mailing Address: P.O. Box 130 Belle Glade, FL 33430</b>			FILING AND EXAMINATION FEES: \$ <b>2705.00</b> DATE <b>10/11/00</b> CERTIFICATION FEE: \$ DATE
11. TELEPHONE (include area code) <b>Phone: 561 996-6469</b>	12. FAX (include area code) <b>Fax: 561 996-6480</b>	13. E-MAIL <b>growersmgt@aol.com</b>	14. CROP KIND (Common Name) <b>Lettuce</b>
15. GENUS AND SPECIES NAME OF CROP <b>Lactuca sativa</b>		16. FAMILY NAME (Botanical) <b>Compositae</b>	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input checked="" type="checkbox"/> NO (If "no," go to item 22)	
		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO	
		21. IF "YES" TO ITEM 20, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <b>US 10/12/99</b> <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF OWNER <b>Paul Orsenigo</b>		SIGNATURE OF OWNER	
NAME (Please print or type) <b>Paul Orsenigo</b>		NAME (Please print or type)	
CAPACITY OR TITLE <b>President, Florida Vegetable Exch.</b>	DATE <b>10-9-00</b>	CAPACITY OR TITLE	DATE

Exhibit A  
Origin and Breeding History

Terrapin is the product of a cross made in 1990 between Cos II and Tall Guzmaine. Cos II is a robust, romaine type lettuce, but susceptible to corky root rot (CRR). Tall Guzmaine is a cultivar well adjusted to south Florida organic soil and tolerant to CRR.

The F1 was grown in the greenhouse and the seed was harvested in bulk. The F2 was grown in CRR infected organic soil and plant selections were initiated. Each plant selection was lifted and grown in the greenhouse for seed production. Seeds of the plant selected were sent in April to California for seed increase. Those California seed increases were planted in the fall in Florida for further observation and plant selections. This procedure was repeated until the desired uniformity, head size, quality, and tolerance to CRR was obtained in 1998. Further large-scale evaluations were made at least three times in early 1998, 1999, and 2000, and good resistance to CRR, excellent uniformity, yields, and quality were obtained. Concurrently, seeds were harvested in bulk and planted in large plots. Commercial fresh lettuce production in 1999-2000 was enthusiastically accepted by the trade and consumers. Terrapin is significantly superior in weight, height and quality than the standard cultivars grown in Florida.

Subsequent sexual reproductions were made in 1998, 1999, and 2000. In the 3 noted generations no off-types were noted. The variety is stable and uniform without any variants or off-types noted.

Terrapin differs from the female parent in that is resistant to CRR and the female parent is susceptible. It differs from the male parent in its plant height.

Regarding your question concerning Cos II, the female parent of "Terrapin", I have spoken with Dr. Victor Guzman to try to determine the history of Cos II. Cos II was a single plant selection that was made by Dr. Guzman. He has no recollection or records of the origin of Cos II. Therefore, Cos II is considered an unknown variety in Dr. Guzman's breeding program. Cos II was only used one time for the "Terrapin" cross. There was no stock seed kept from Cos II and therefore it will not be used in his program in the future.

Exhibit B  
Statement of Distinctness

Terrapin most closely resembles Floricos 83 but is taller in height and heavier in weight. See Table A.

I would also ask that you amend our Exhibit B to state that "Terrapin" has white seed and Floricos 83 has black seed.

## Analysis of Plant Heights and Weights of Two Lettuce Varieties

### Summary.

The mean plant height and plant weight was significantly greater for Terrapin compared to Floricos 83. On average, Terrapin is 6.44 cm taller (range: 7.5 to 5.4) and 388 g heavier (range: 513 to 264) than Floricos 83.

### Details.

Table A lists the data for two lettuce varieties that were compared for mean plant height and weight. The data were compared using the t test procedure from SAS statistical software.

Table A. Mean plant heights and weights for 25 plants of two lettuce varieties.

Plant #	Plant HT (cm)		Plant WT (g)	
	Terrapin	Floricos 83	Terrapin	Floricos 83
1	42	33	1615	1195
2	40	37	1005	755
3	46	37	1340	1080
4	41	38	1655	1015
5	45	36	1275	1040
6	40	34	1620	605
7	45	39	1185	1230
8	43	39	1255	1055
9	46	36	850	765
10	41	37	1385	1005
11	42	37	1360	930
12	44	36	1255	985
13	44	36	1065	945
14	43	39	1375	850
15	46	40	950	1070
16	45	39	1735	825
17	43	40	1755	1025
18	44	34	1645	985
19	42	34	915	775
20	44	36	1305	675
21	46	37	1110	1140
22	42	38	1440	1205
23	45	38	1385	1045
24	41	36	1465	750
25	44	37	1590	880
Mean	43.4	36.9	1341	953

The above measurements and weights were taken in Belle Glade, Florida on 3/9/00.  
From a 12/29/99 planting.

The results of the SAS output are presented in Appendix 1 and summarized in tables B and C. Table B shows that the probability is very high that the variances for plant height are equal between the two varieties, so the pooled variance method is used to calculate the probability for differences in plant height between the two varieties. The probability that the variances are equal for plant weight, however, is fairly low, and if we use a 0.05 probability as a minimum we would conclude that the variances are not equal and calculate the probability for differences in plant weight using the Satterthwaite method (Table C).

Table B. Test for equality of Variances for height and weight of two lettuce varieties.

Equality of Variances						
Variable	Method	Num DF	Den DF	F Value	Pr > F	
height	Folded F	24	24	1.02	0.9572	
weight	Folded F	24	24	2.38	0.0382	

The results in Table C show that the probability that plant height and plant weight are equal between the two varieties is less than 0.0001, so we conclude that the two varieties differ with regard to these two measurements. The confidence limits (Appendix 1) show that on average, Terrapin is 6.44 cm taller (range: 7.5 to 5.4) and 388 g heavier (range: 513 to 264) than Floricos 83.

Table C. T-Test for differences in plant height and weight between two lettuce varieties.

T-Tests						
Variable	Method	Variances	DF	t Value	Pr >  t	
height	Pooled	Equal	48	-11.97	<.0001	
weight	Satterthwaite	Unequal	41.1	-6.26	<.0001	

## Appendix 1. SAS output page for t test of heights and weights of two lettuce varieties.

Tuesday, October 10, 2000

## The SAS System

## The TTEST Procedure

## Statistics

Variable	Class	N	Lower CL Mean	Mean	Upper CL Mean	Lower CL Std Dev	Std Dev	Upper CL Std Dev	Std Err
height	Floricos	25	36.139	36.92	37.701	1.4767	1.8912	2.631	0.3782
height	Terrapin	25	42.571	43.36	44.149	1.4931	1.9122	2.6602	0.3824
height	Diff (1-2)		-7.522	-6.44	-5.358	1.5859	1.9018	2.3759	0.5379
weight	Floricos	25	883.59	953.2	1022.8	131.68	168.64	234.6	33.728
weight	Terrapin	25	1234	1341.4	1448.8	203.23	260.27	362.08	52.054
weight	Diff (1-2)		-512.9	-388.2	-263.5	182.87	219.29	273.96	62.026

## T-Tests

Variable	Method	Variances	DF	t Value	Pr >  t
height	Pooled	Equal	48	-11.97	<.0001
height	Satterthwaite	Unequal	48	-11.97	<.0001
weight	Pooled	Equal	48	-6.26	<.0001
weight	Satterthwaite	Unequal	41.1	-6.26	<.0001

## Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
height	Folded F	24	24	1.02	0.9572
weight	Folded F	24	24	2.38	0.0382

**Yield comparison of "Terrapin" a cos lettuce to "  
Floricoa 83" the standard cos cultivar**

**Table A. Heights and weights of 25 plants of Terrapin  
and Floricos 83**

PLANT #	PLANT HEIGHT (cm)		PLANT WEIGHT (grams)	
	TERRAPIN	FLORICOS 83	TERRAPIN	FLORICOS 83
1	40	36	1210	780
2	42	34	1325	765
3	45	32	1160	640
4	43	35	1085	655
5	41	33	1175	710
6	45	36	1020	550
7	43	34	1160	605
8	41	37	1350	715
9	45	33	1050	585
10	46	33	1185	620
11	42	36	1340	725
12	40	35	1295	690
13	44	32	1370	715
14	43	33	1140	680
15	45	36	1060	550
16	45	34	1140	625
17	46	33	1185	695
18	41	36	1130	630
19	42	34	1320	705
20	43	34	1385	740
21	44	33	1350	730
22	44	32	1240	645
23	41	33	1310	720
24	46	36	1260	630
25	42	35	1050	525
AVG.	43.6	34.2	1212	665

Measured Weights were taken in Belle Glade, Florida on 12-1-03  
From a 10-4-03 Planting

## PVP Application: Lettuce Terrapin

## Yield comparison of Terrapin to Floricos 83 the standard cos cultivar

A SAS t test procedure was used under the assumption that the true means of the varieties are the same and the variance of the two varieties are equal. In case of unequal variances Satterthwaite method was used.

## Summary

The analysis of the data shows that the yield means of the varieties are not the same. The mean plant biomass expressed as height and weight was highly significant greater for Terrapin compared to Floricos 83. Terrapin was 9.4 cm taller (range : 6.0 to 5.0) and 547g. heavier (range: 365 to 255) than Floricos 83.

## Details

Table A presents the yield data (biomass) for height and weight of the lettuce varieties. Output for the t test of heights and weights of Terrapin and Floricos 83 are presented in Appendix 1 and tables B and C.

## Results

The variances in plant height are equal between the two varieties (Table B) therefore the pooled variance methods is used. The variances for plant weight are not equal, therefore the Satterthwaite method is used.

Table B. Variances for height and weight of two lettuce cultivars

Equality of Variances					
Variable	Method	Num DF	Den DF	F value	Pr > F
Height	Folded F	24	24	1.62	0.2458
Weight	Folded F	24	24	2.71	0.0177

Observed differences are real (Table C) statistically significant at better than the 0.1 level. There are a highly significant differences in height and weight of the two varieties. Terrapin produced greater biomass than Floricos 83.

Table C. T-test for differences in plant height and weight between Terrapin and Floricos 83

Variable	Method	Variances	DF	t value	Pr >  t
Height	Pooled	Equal	48	-18.46	<.0001
Height	Satterthwaite	Unequal	45.5	-18.46	<.0001
Weight	Pooled	Equal	48	-20.64	<.0001
Weight	Satterthwaite	Unequal	39.6	-20.64	<.0001

61 options ls=80 ps=53;  
62 data;  
63 input Var \$ PltHt PltWt;  
64 cards;

200100006

NOTE: The data set WORK.DATA2 has 50 observations and 3 variables.

NOTE: DATA statement used (Total process time):

real time	0.01 seconds
cpu time	0.00 seconds

115 proc print; run;

NOTE: There were 50 observations read from the data set WORK.DATA2.

NOTE: PROCEDURE PRINT used (Total process time):

real time	0.00 seconds
cpu time	0.00 seconds

116 proc sort; by var; run;

NOTE: There were 50 observations read from the data set WORK.DATA2.

NOTE: The data set WORK.DATA2 has 50 observations and 3 variables.

NOTE: PROCEDURE SORT used (Total process time):

real time	0.21 seconds
cpu time	0.01 seconds

117 proc means; by var; run;

NOTE: There were 50 observations read from the data set WORK.DATA2.

NOTE: PROCEDURE MEANS used (Total process time):

real time	0.07 seconds
cpu time	0.01 seconds

118 proc ttest;  
119 class var;  
120 var PltHt PltWt;  
121 run;

NOTE: There were 50 observations read from the data set WORK.DATA2.

NOTE: PROCEDURE TTEST used (Total process time):

real time	0.00 seconds
cpu time	0.00 seconds

10:04 Wednesday, June 1, 2005

200100006

Obs	Var	Plt Ht	Plt Wt
1	Terrapin	40	1210
2	Floricos	36	780
3	Terrapin	42	1325
4	Floricos	34	765
5	Terrapin	45	1160
6	Floricos	32	640
7	Terrapin	43	1085
8	Floricos	35	655
9	Terrapin	41	1175
10	Floricos	33	710
11	Terrapin	45	1020
12	Floricos	36	550
13	Terrapin	43	1160
14	Floricos	34	605
15	Terrapin	41	1350
16	Floricos	37	715
17	Terrapin	45	1050
18	Floricos	33	585
19	Terrapin	46	1185
20	Floricos	33	620
21	Terrapin	42	1340
22	Floricos	36	725
23	Terrapin	40	1295
24	Floricos	35	690
25	Terrapin	44	1370
26	Floricos	32	715
27	Terrapin	43	1140
28	Floricos	33	680
29	Terrapin	45	1060
30	Floricos	36	550
31	Terrapin	45	1140
32	Floricos	34	625
33	Terrapin	46	1185
34	Floricos	33	695
35	Terrapin	41	1130
36	Floricos	36	630
37	Terrapin	42	1320
38	Floricos	34	705
39	Terrapin	43	1385
40	Floricos	34	740
41	Terrapin	44	1350
42	Floricos	33	730
43	Terrapin	44	1240
44	Floricos	32	645
45	Terrapin	41	1310
46	Floricos	33	720
47	Terrapin	46	1260

10:04 Wednesday, June 1, 2005

200100006

Obs	Var	Plt Ht	Plt Wt
48	Floricos	36	630
49	Terrapin	42	1050
50	Floricos	35	525

----- Var=Floricos -----

## The MEANS Procedure

Variable	N	Mean	Std Dev	Minimum	Maximum
PltHt	25	34.2000000	1.5000000	32.0000000	37.0000000
PltWt	25	665.2000000	68.7155975	525.0000000	780.0000000

----- Var=Terrapin -----

Variable	N	Mean	Std Dev	Minimum	Maximum
PltHt	25	43.1600000	1.9078784	40.0000000	46.0000000
PltWt	25	1211.80	113.1543931	1020.00	1385.00

10:04 Wednesday, June 1, 2005

## Appendix I

## The TTEST Procedure

200100006

## Statistics

Variable	Var	N	Lower CL	Mean	Upper CL	Lower CL	Std Dev
			Mean		Mean	Std Dev	
PltHt	Floricos	25	33.581	34.2	34.819	1.1712	1.5
PltHt	Terrapin	25	42.372	43.16	43.948	1.4897	1.9079
PltHt	Diff (1-2)		-9.936	-8.96	-7.984	1.4311	1.7161
PltWt	Floricos	25	636.84	665.2	693.56	53.655	68.716
PltWt	Terrapin	25	1165.1	1211.8	1258.5	88.354	113.15
PltWt	Diff (1-2)		-599.8	-546.6	-493.4	78.064	93.61

## Statistics

Variable	Var	Upper CL	Std Err	Minimum	Maximum
		Std Dev			
PltHt	Floricos	2.0867	0.3	32	37
PltHt	Terrapin	2.6541	0.3816	40	46
PltHt	Diff (1-2)	2.1439	0.4854		
PltWt	Floricos	95.594	13.743	525	780
PltWt	Terrapin	157.41	22.631	1020	1385
PltWt	Diff (1-2)	116.95	26.477		

## T-Tests

Variable	Method	Variances	DF	t Value	Pr >  t
PltHt	Pooled	Equal	48	-18.46	<.0001
PltHt	Satterthwaite	Unequal	45.5	-18.46	<.0001
PltWt	Pooled	Equal	48	-20.64	<.0001
PltWt	Satterthwaite	Unequal	39.6	-20.64	<.0001

## Equality of Variances

Variable	Method	Num DF	Den DF	F Value	Pr > F
PltHt	Folded F	24	24	1.62	0.2458
PltWt	Folded F	24	24	2.71	0.0177

OBJECTIVE DESCRIPTION OF VARIETY  
LETTUCE *Lactuca sativa*

NAME OF APPLICANT (S)

Grower's Management Inc., Roth Farms Inc., and TKM Farms Inc.

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

P.O. Box 130  
Belle Grade, FL 33430

Five  
32814

FOR OFFICIAL USE ONLY

VPPO NUMBER

200100006

VARIETY NAME

Terrapin

EXPERIMENTAL DESIGNATION

Place numbers in the boxes for the characters which best describe this variety. Measured data should be the mean of an appropriate number (at least 10) of well spaced plants. Royal Horticultural Society or any recognized color standard may be used to determine plant colors.

The location of the test area is:

Bellegrade, Florida

Color System Used:

RHS

1. PLANT TYPE: (See list of suggested check varieties page 4.)

04

01=Cutting/Leaf  
02=Butterhead  
03=Sibb  
04=Cos or Romaine

05=Great Lakes Group  
06=Vanguard Group  
07=Imperial Group  
08=Eastern (Ithaca) Group

09=Stem  
10=Latin  
11=OTHER

2. SEED:

COLOR  
1=White (Silver Gray)  
2=Black (Gray Brown)  
3=Brown (Amber)

LIGHT DORMANCY

1=Light Required  
2=Light Not Required

HEAT DORMANCY

1=Susceptible  
2=Not Susceptible

1

2

1

3. COTYLEDON TO FOURTH LEAF STAGE: NOTE: Provide a color photograph or photocopy of the fourth leaf from 20 day old seedling grown under optimal conditions.

2

SHAPE OF COTYLEDONS:

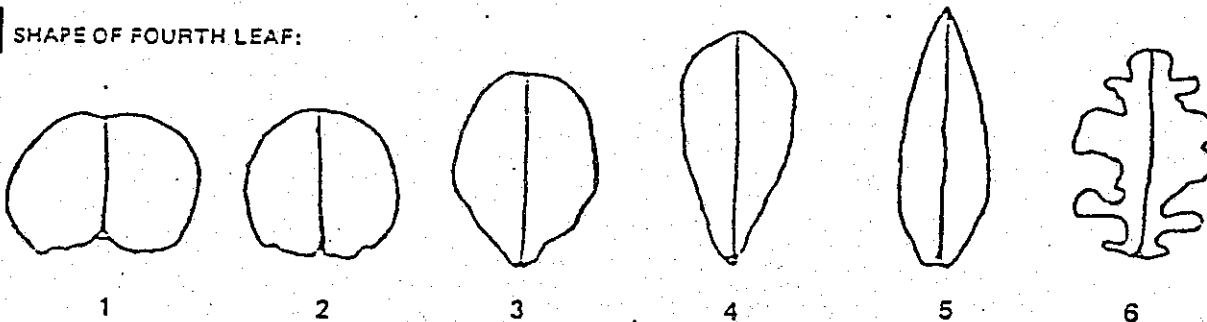
1=Broad

2=Intermediate

3=Spatulate

4

SHAPE OF FOURTH LEAF:



17

LENGTH/WIDTH INDEX OF FOURTH LEAF: LW x 10

1

APICAL MARGIN:

1=Entire

4=Moderately Dentate

7=Lobed

5

BASAL MARGIN:

2=Crenate/Gnawed  
3=Finely Dentate

5=Coarsely Dentate  
6=Incised

8=OTHER (specify)

1

UNDULATION:

1=Flat

2=Slight

3=Medium

4=Marked

3

GREEN COLOR:

1=Yellow Green  
2=Light Green

3=Medium Green  
4=Dark Green

5=Blue Green  
6=Silver Green

7=Gray Green

ANTHOCYANIN:

1

DISTRIBUTION:

1=Absent  
2=Margin Only

3=Spotted  
4=Throughout

5=OTHER (specify)

1

CONCENTRATION:

1=Light

2=Moderate

3=Intense

1

ROLLING:

1=Absent

2=Present

1

CUPPING:

1=Uncupped

2=Slight

3=Markedly

1

REFLEXING:

1=None

2=Apical Margin

3=Lateral Margins

4. MATURE LEAVES (observe harvest-mature outer leaves):

**NOTE:** Provide color photo of harvest-mature leaves which accurately shows color and margin characteristics.

**MARGIN:**

2	INCISION DEPTH: <i>(deepest penetration of the margin)</i>	1=Absent/Shallow (Dark Green Boston)	2=Moderate (Vanguard)	3=Deep (Great Lakes 659)
2	INDENTATION: <i>(finest divisions of the margin)</i>	1=Entire (Dark Green Boston) 2=Shallowly Dentate (Great Lakes 65)	3=Deeply Dentate (Great Lakes 659) 4=Crenate (Vanguard)	5=OTHER <i>(specify)</i>
1	UNDULATION OF THE APICAL MARGIN:	1=Absent/Slight (Dark Green Boston)	2=Moderate (Vanguard)	3=Strong (Great Lakes 659)
3	GREEN COLOR:	1=Very Light Green (Bibb) 2=Light Green (Minetto)	3=Medium Green (Great Lakes) 4=Dark Green (Vanguard)	5=Very Dark Green 6=OTHER
	ANTHOCYANIN <i>(grown at or below 10 C):</i>			
1	DISTRIBUTION:	1=Absent 2=Margin Only (Big Boston)	3=Spotted (Calif. Cream Butter) 4=Throughout (Prize Head)	5=OTHER <i>(specify)</i>
	CONCENTRATION:	1=Light (Iceberg)	2=Moderate (Prize Head)	3=Intense (Ruby)
3	SIZE:	1=Small	2=Medium	3=Large
2	GLOSSINESS:	1=Dull (Vanguard)	2=Moderate (Salinas)	3=Glossy (Great Lakes)
2	BLISTERING:	1=Absent/Slight (Salinas)	2=Moderate (Vanguard)	3=Strong (Prize Head)
2	LEAF THICKNESS:	1=Thin	2=Intermediate	3=Thick
1	TRICHOMES:	1=Absent (smooth)	2=Present (spiny)	

5. PLANT (at market stage. Choose a comparison variety appropriate for this type.):

SPREAD OF FRAME LEAVES:   cm This Variety   cm NA (specify comparison variety)

HEAD DIAMETER (market trimmed with single cap leaf):  
cm This Variety   cm NA (specify comparison variety)

HEAD SHAPE: 1=Flattened 3=Spherical 5=Non-Heading  
2=Slightly Flattened 4=Elongate 6=OTHER

HEAD SIZE CLASS: 1=Small 2=Medium 3=Large

HEAD COUNT PER CARTON

HEAD WEIGHT:  
g This Variety       Floricos 83 (specify comparison variety)

HEAD FIRMNESS: 1=Loose 3=Firm  
2=Moderate 4=Very Firm

6. BUTT (bottom of market-trimmed head):

3	SHAPE:	1=Slightly Concave	2=Flat	3=Rounded
2	MIDRIB:	1=Flattened (Salinas)	2=Moderately Raised	3=Prominently Raised (Great Lakes 659)

**7. CORE (stem of market-trimmed head):**

38 mm Diameter at base of head

Ratio of head diameter/core diameter

94 Core height from base of head to apex:  
mm This Variety 71 mm Floricos 83 (specify comparison variety)

8. BOLTING (Give First Water Date 4-6-00 ): NOTE: First Water Date is the date seed first receives adequate moisture to germinate. This can and often does equal the planting date.

83 Number of days from First Water Date to seed stalk emergence (summer conditions):  
This Variety 81 Floricos 83 (specify comparison variety)

3 BOLTING CLASS: 1=Very Slow 3=Medium 5=Very Rapid  
2=Slow 4=Rapid

40 Height of mature seed stalk:  
cm This Variety 36 cm Floricos 83 (specify comparison variety)

## 8. BOLTING cont'd.

Spread of Bolter Plant (at widest point):  
 23 cm This Variety 21 cm Floricos 83 (specify comparison variety)

- 1 BOLTER LEAVES: 1=Straight 2=Curved
- 1 MARGIN: 1=Entire 2=Dentate
- 3 COLOR: 1=Light Green 2=Medium Green 3=Dark Green
- BOLTER HABIT:
- 2 TERMINAL INFLORESCENCE: 1=Absent 2=Present
- 2 LATERAL SHOOTS: (above head) 1=Absent 2=Present
- 1 BASAL SIDE SHOOTS: 1=Absent 2=Present

## 9. MATURITY (earliness of harvest-mature head formation):

NOTE: Complete this section for at least one season.

SEASON	Applic. 1/ #of days	Check 2/ #of days	CHECK VARIETY 2/
Spring	55	56	Floricos 83
Summer			
Fall	59	57	Floricos 83
Winter	69	73	Floricos 83

Give planting date(s), and location(s):

Spring 2-17-99 Belle Glade, Florida

Summer

Fall 10-26-99 Belle Glade, Florida

Winter 12-29-99 Belle Glade, Florida

1/ First water date to harvest.

2/ Fill in check variety name on the appropriate line.

## 10. ADAPTATION:

PRIMARY REGIONS OF ADAPTION (tested and proven adapted):

(0=Not tested

1=Not Adapted

2=Adapted)

- 1 Southwest (Calif., Ariz. desert) 1 West Coast 2 Northeast
- 0 Northcentral 2 Southeast 0 OTHER

SEASON:

2 Spring (area Florida)

2 Fall (area Florida + Northeast)

0 Summer (area)

2 Winter (area Florida)

- 1 GREENHOUSE: 0=Not tested 1=Not Adapted 2=Adapted
- 3 SOIL TYPE: 1=Mineral 2=Organic 3=Both

11. DISEASES AND STRESS REACTIONS (0=Not tested; 1=Susceptible; 2=Intermediate; 3=Resistant; 4=Highly resistant; 5=Tolerant):

VIRUS

- ☐ Big Vein  
☐ Lettuce Mosaic  
☐ Cucumber Mosaic  
☐ Broad Bean Wilt  
☐ Turnip Mosaic  
☐ Beet Western Yellows  
☐ Lett. Infectious Yellows  
☐ Other Virus \_\_\_\_\_

FUNGAL/BACTERIAL

- ☒ Corky Root Rot (Pythium Root Rot)  
☐ Downy Mildew (Races \_\_\_\_\_)  
☐ Powdery Mildew  
☐ Sclerotinia Rot  
☐ Bacterial Soft Rot (*Pseudomonas* spp. & others)  
☐ Botrytis (Gray Mold)  
☐ OTHER \_\_\_\_\_

INSECTS

- ☐ Cabbage Loopers  
☐ Root Aphids  
☐ Green Peach Aphid  
☐ Other Insect \_\_\_\_\_

PHYSIOLOGICAL/STRESS

- ☒ Tipburn  
☒ Heat  
☐ Drought  
☐ Cold  
☐ Salt  
☐ Brown Rib (Rib Discoloration, Rib Blight)  
☐ OTHER \_\_\_\_\_

POST HARVEST

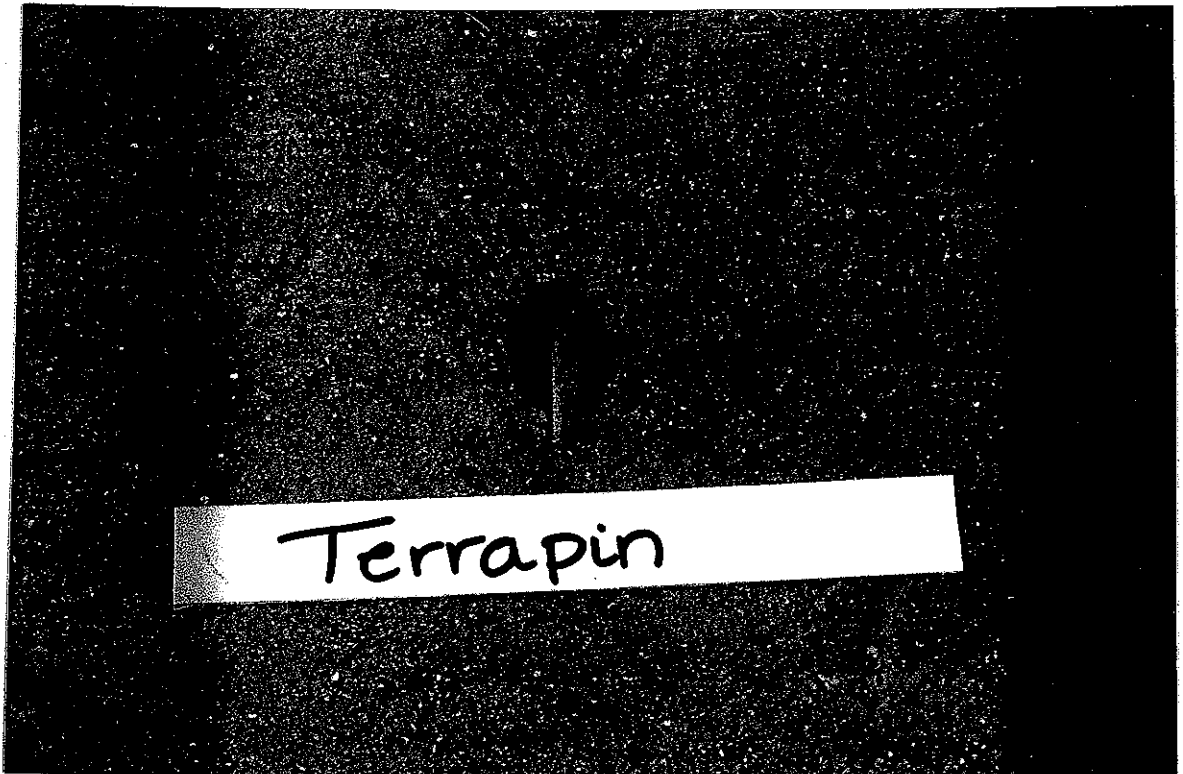
- ☐ Pink Rib  
☐ Russet Spotting  
☐ Rusty Brown Discoloration  
☐ Internal Rib Necrosis (Blackheart, Gray Rib, Gray Streak)  
☐ Brown Stain

12. BIOCHEMICAL OR ELECTROPHORETIC MARKERS:

13. COMMENTS:

SUGGESTED CHECK VARIETIES

<u>TYPE</u>	<u>CHECK VARIETY</u>
1) CUTTING/LEAF	SALAD BOWL
2) BUTTERHEAD	DARK GREEN BOSTON
3) BIBB	BIBB
4) COS, OR ROMAINE	PARRIS ISLAND
5) GREAT LAKES GROUP	GREAT LAKES 659-700
6) VANGUARD GROUP	VANGUARD
7) IMPERIAL GROUP	VIVA
8) EASTERN GROUP	ITHACA
9) STEM	CEL TUCE
10) LATIN	MATCHLESS



# Florida Vegetable Exchange

200100006

P.O. Box 948153

Maitland, Florida 32794-8153

Phone (321) 214-5200 Fax (321) 214-0210

June 7, 2005

Ms. Robin A. Davis, Senior Examiner  
Plant Variety Protection Office  
NAL Bldg., Room 400  
10301 Baltimore Avenue  
Beltsville, MD 20705-2351

Dear Ms. Davis:

Re: Lettuce Applications No. 200100006, "Terrapin" and 2001000005 "Snappy"

Please be advised that we are requesting transfer of PVP ownership from the Florida Vegetable Exchange to the following joint entities: Grower's Management; Roth Farms and TKM Farms for the two lettuce varieties referenced above. Please forward all correspondence related to these varieties to the following representative of the joint entities:

David Basore  
Grower's Management  
Physical Address: 1100 N. Main Street, Ste. D  
Mailing Address: P.O. Box 130  
Belle Glade, FL 33430  
Phone: (561) 996-6469  
Fax: (561) 996-6480  
[growersmgt@aol.com](mailto:growersmgt@aol.com)

If you have any questions, please do not hesitate to contact me.

Sincerely,



Danny Raulerson, Manager  
Florida Vegetable Exchange  
P.O. Box 948153  
Maitland, FL 32794-8153  
Phone: (321) 214-5200  
Fax: (321) 214-0210  
[danny.raulerson@ffva.com](mailto:danny.raulerson@ffva.com)

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

**EXHIBIT E**  
**STATEMENT OF THE BASIS OF OWNERSHIP**

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) Grower's Management Inc., Roth Farms Inc., and TKM Farms Inc. <i>RAD 8/13/05</i>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER  GX816	3. VARIETY NAME  Terrapin
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)  P.O. Box 130 Belle Grade, FL 33430 <i>RAD 8/13/05</i>		5. TELEPHONE (include area code) 561-996-6469 <i>RAD 8/13/05</i>	6. FAX (include area code) 561-996-6480 <i>RAD 8/13/05</i>
		7. PVPO NUMBER  200100006	
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain. <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			

9. Is the applicant (individual or company) a U.S. national or U.S. based company? If no, give name of country <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
10. Is the applicant the original owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, please answer <u>one</u> of the following:	
a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)? <input type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country	
b. If original rights to variety were owned by a company(ies), is(are) the original owner(s) a U.S. based company? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no, give name of country	
11. Additional explanation on ownership (if needed, use reverse for extra space):	

**PLEASE NOTE:**

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

STD-470-E (07-97) (Destroy previous editions).

Electronic version designed using WordPerfect InForms by USDA-AMS-IMB.